

SECTION 2

The three major elements of motor vehicle crashes are roadways and environments, vehicle characteristics, and operator actions. This section of the report examines the relationship of environmental and roadway conditions to crashes, including weather, road surfaces and types, geographic or political subdivisions, and the distribution of crashes over time.

The analysis presented in this section details the conditions under which Vermont's crashes occurred in 2006. Many of the findings present in this report are similar to those found in previous years and lend some confidence in our ability to depict crash characteristics from reports filed by law enforcement.

Previous editions noted that crashes were more likely in urban than rural areas. This trend held true for 2006 with 55% of crashes occurring in urban areas and 45% in rural. Urban area crashes are characteristically different from rural crashes in that they are comprised of a smaller proportion of injury crashes (39% vs. 61%), proportionally fewer fatal crashes (18% vs. 82%), and are more likely to occur at intersections (31% vs. 18%). Property damage crashes, on the other hand, are more likely to occur in urban areas (60%) than in rural areas (40%). Overall, relatively few crashes occur on interstate highways (8%) and are more likely to occur on town (21%) or state (43%) roadways. Given increases in monetary thresholds at which local law enforcement report property damage crashes, it is likely that the proportion of property damage crashes occurring in towns and municipalities is somewhat greater than reflected in this report even despite the gains from the new reporting system.

The proportion of crashes reported from Chittenden county increased slightly to 34% of all reported crashes, compared to 33% in 2005. Moreover, property damage crashes reported from Chittenden county in 2006 increased to 38% of all property damage crashes, compared to 30% in 2005. Chittenden county experienced the highest crash rates per 1,000 population, followed by Lamoille county. Chittenden and Lamoille counties also exhibited the highest crash rates per 100 million vehicle miles traveled. Grand Isle and Essex counties experienced the lowest population crash rates while Essex and Addison had the lowest vehicle miles traveled crash rates of reported crashes in Vermont in 2006.

Construction zone crashes remain a concern for highway safety officials, although it is recognized that identification of such crashes in the crash report data is problematic under current reporting practices. However, the available data indicate that 78 construction zone crashes were reported in 2006, almost the same number reported in 2005. Following too closely, inattention, failure to yield right of way and visibility obstructed were common operator contributing circumstances for construction zone crashes in 2006. Not surprisingly, construction zone crashes occur mainly during week days between 6 AM and 6 PM.

As has been noted in previous reports, the timing of crashes tends to parallel work and leisure time schedules with some seasonal influences. Notably, a higher percentage of fatal crashes occurred on Friday and Saturday and between the hours of 10 a.m.-10 p.m. in 2006. January and December experienced a greater number of crashes than other months. Moreover, proportionally more fatal crashes occurred in May, March, June and September than other times of the year. Overall, the rate of crashes occurring on holidays (30.4 per 24 hour period) was lower than the average daily rate in 2005 (30.57 per 24 hour period). Crash rates during Halloween, Thanksgiving, and St. Patrick's day were the highest of holidays.